

Necessary content of Technical Documentation

Directional lamps, LED and related equipment

Directional lamps, light emitting diode lamps (LED) and related equipment are covered by ecodesign requirements according to Regulation (EU) No 1194/2012.

The requirements only apply to lamps and related equipment as described and defined in Article 1 and 2 of the Regulation.

The documentation shall be produced before the lamp or related equipment is placed on the market.

The technical documentation shall be sufficient to enable assessment of the conformity of the lamp or related equipment with the requirements. In this respect it is important that test reports are included in the technical documentation.

Be aware that directional lamps and LED are also covered by the energy labelling Regulation (EU) No 874/2012.

Be aware that the Regulation also covers lamp functionality requirements for non-directinal LED.

Please see the separate guide with regards to energy labelling of lamps and luminaires.

Technical documentation for directional lamps, light emitting diode lamps and related equipment

Demands	How to comply
Name and address of supplier	Company name and complete address.
General description	Description of the model so that it is easily identified (model name and number, size etc.).
List of applied standards	Applied measurement standards (harmonised standards and/or other standards).
Identification and signature of the person empowered to bind the supplier	Name and signature of person responsible for the product.
Product information directional lamps	<p>The product information requirements do not apply to filament lamps not fulfilling the efficiency requirements of stage 2 and LED modules when marketed as part of a luminaire from which they are not intended to be removed by the end-user</p> <ul style="list-style-type: none"> Nominal useful luminous flux Nominal life time of the lamp in hours (not longer than the rated life time) Colour temperature(expressed in Kelvins, also graphically or in words) Number of switching cycles before premature failure Warm-up time to reach 60% of the full light output (may be indicated as "instant full light" if less than 1 second) A warning if the lamp cannot be dimmed or can be dimmed only on specific dimmers, in latter case a list of compatible dimmers to be provided If designed to be used in non-standard conditions, information on those conditions Lamp dimensions in mm, length and largest diameter Nominal beam angle in degrees A warning that the lamp is not suitable for accent light, if beam angle is $\geq 90^\circ$ and its useful luminous flux as defined in regulation Annex III point 1.1 is to be measured in a 120° cone If the lamp cap is a standardised type also used with filament lamps, but the lamp's dimensions are different from the dimensions of the filament lamp(s) that the lamp is meant to replace, a drawing comparing the lamp's dimensions to the dimensions of the filament lamp(s) it replaces

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Demands	How to comply
	<ul style="list-style-type: none"> • An indication that the lamp is of a type listed in the first column of Table 6 may be displayed only if the luminous flux of the lamp in a 90° cone (Φ_{90°) is not lower than the reference luminous flux indicated in Table 6 for the smallest wattage among the lamps of the type concerned. See more in annex III point 3.1.2. An equivalence claim involving the power of a replaced lamp type may be displayed only if the lamp type is listed in Table 6 and if the luminous flux of the lamp in a 90° cone (Φ_{90°) is not lower than the corresponding reference luminous flux in Table 6 of the Regulation. See more in Annex III point 3.1.2. • Rated power • Rated useful luminous flux • Rated lamp life time • Lamp power factor • Lumen maintenance factor at the end of the nominal life (except for filament lamps) • Starting time expressed in X.X seconds • Colour rendering • Colour consistency (only for LEDs) • Rated peak intensity in candela (cd) • Rated beam angle • Indication if it is intended for use in outdoor or industrial applications • Spectral power distribution in the range 180-800nm • The intended purpose • State if it is not suitable for household room illumination
<p>If the lamp contains mercury</p>	<ul style="list-style-type: none"> • Lamp mercury content expressed as X.X mg • Instruction on how to clean up the lamp debris in case of lamp breakage and indication of website to consult for information • Recommendations on how to dispose of the lamp at its end of life

Rounded to first decimal place

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COMMISSION REGULATION (EU) No 1194/2012 of 12 December 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for directional lamps, light emitting diode lamps and related equipment

COMMISSION DELEGATED REGULATION (EU) No 874/2012 of 12 July 2012 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of electrical lamps and luminaires

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Demands	How to comply
Information for LED replacing fluorescent lamps without integrated ballast	<ul style="list-style-type: none"> A warning that the overall energy efficiency and light distribution of any installation that uses such lamps are determined by the design of the installation Data supporting claims that an LED lamp replaces a fluorescent lamp without integrated ballast of a particular wattage may be made only if: <ul style="list-style-type: none"> (i) The luminous intensity in any direction around the tube axis does not deviate by more than 25 % from the average luminous intensity around the tube, and (ii) The luminous flux of the LED lamp is not lower than the luminous flux of the fluorescent lamp of the claimed wattage. The luminous flux of the fluorescent lamp shall be obtained by multiplying the claimed wattage with the minimum luminous efficiency value corresponding to the fluorescent lamp in the Regulation (iii) The wattage of the LED lamp is not higher than the wattage of the fluorescent lamp it is claimed to replace
Information for special purpose products	<p>The chromaticity coordinates if the coordinates fall within the range mentioned in Annex I point 1.</p> <p>The intended special purpose of the product. ■</p> <p>A list of the technical parameters that make the product design specific for the stated intended special purpose.</p>
Product information for equipment other than luminaires, designed for installation between the mains and the lamp	A warning if the equipment is not compatible with energy-saving lamps.
Product information for control gear (for definition of control gear see Article 1 point 22 and 23)	<ul style="list-style-type: none"> Indication that the product is intended to be used as a lamp control gear If applicable, the information that product may be operated in no-load mode
Combination of product settings	Specify at least one realistic combination of products settings and conditions in which the product complies with the Regulation.
Copy of information	Copy of information that must be provided (according to the Regulation Annex III point 3).

Be aware that all product information for special purpose lamps shall state the intended special purpose together with a warning that they are not suitable for household room illumination.

This guide presents the contents of the Regulations and is addressed to manufacturers, importers and others interested. The guide is not a substitution for the Regulations, and in any case of doubt, the Regulations are applicable. This guide is not legally binding as a binding interpretation can only be made by the EU court.